

## **WILLCOX BASIN**

The Willcox basin is located in the northern part of the Sulphur Springs Valley in southeastern Arizona. The Town of Willcox lies near the center of the basin and is about 80 miles east of Tucson. The area, a closed basin surrounded by topographically higher areas, can be considered a separate watershed. All drainage is internal and flows to the Willcox Playa in the south-central part of the basin. Elevations in the area range from 10,717 feet above mean sea level at Mount Graham to less than 4,130 feet above mean sea level at the Willcox Playa.

Surface runoff from rain and snowmelt flows toward the lowest point of the basin, the Willcox Playa, but rarely reaches it before infiltrating into the ground. The playa encompasses an area of about 50 square miles and historically has been the only outlet for water to leave the basin. The area acts as an evaporation dish for surface water and shallow groundwater, while vegetation surrounding the playa transpires water to the atmosphere (U.S. Geological Survey, 1969).

A few perennial streams which flow toward the valley originate on Mount Graham and Chiricahua Peak. Table 30 lists the streams and their approximate lengths. The location of these perennial reaches are shown on Figure 18. All other streams within the Willcox basin are ephemeral and only flow in response to precipitation events.

**TABLE 30  
PERENNIAL STREAM REACHES IN THE WILLCOX BASIN**

| <b>Stream Reach</b> | <b>Length (miles)</b> |
|---------------------|-----------------------|
| Grant Creek         | 10                    |
| Rock Canyon         | 3                     |
| Turkey Creek        | 5                     |
| Rucker Canyon       | 7                     |

Source: Brown and others, 1981